REMARKS

Entry of this amendment is respectfully requested.

It is believed that the amendments to the claims render the §112, second paragraph rejection moot.

Claims 25-27 were rejected under 35 U.S.C. §103(a) over Argoitia in view of Katsir. Claims 28 and 29 were rejected under 35 U.S.C. §103(a) over Argoitia in view of Katsir and Nelson. Claims 25-27 were rejected under 35 U.S.C. §103(a) over Glass in view of Katsir. Claims 28 and 29 were rejected under 35 U.S.C. §103(a) over Glass and Katsir in view of Nelson. Applicants respectfully traverse each of these rejections.

The present invention, in essence, provides a layer in-between (5) is a chemical compound of the metals of the first and second reflecting layers. [0007] of US 2007/0273989 points out:

> "The (former) problem is solved thereby that the reflecting layers are comprised of the same base material and the intermediate layer is comprised of a chemical compound of this base material with a further material"

As noted above, claims 25-27 were rejected under 35 U.S.C. 103(a) for allegedly being unpatentable over Argoitia in view of Katsir.

In the Examiner's opinion Argoitia teaches that the first reflecting layer is comprised of a metal such as aluminum, the spacer layer is comprised of aluminum oxide, and that the second reflecting layer may also comprise a semi-transparent aluminum layer (col. 5, lines 44-50). Applicant respectfully disagrees with the Examiner's interpretation because Argoitia discloses an aluminum sub-oxide ($Al_2O_{<3}$) as an absorber layer or layer of semi-transmitting aluminum. Reference numeral 14 in Argoitia depicts a reflective material, whereas reference numeral 18 is an "absorber layer" (col. 3, lines 45-50). The spacer layer is designated as numeral 16. 18 is not a second reflecting layer. Instead, it is an absorber layer. In column 5, lines 44-50 cited by the Examiner it is stated:

"In one embodiment, the coated flake includes a dielectric flake substrate with specular major surface, an aluminium reflective layer, an aluminium oxide spacer layer,

and an aluminium sub-oxide ($Al_2O_{>3}$) absorber layer or a layer of semitransmitting aluminium."

The latter layer is not a reflecting layer as it is the case with the presently claimed invention. Moreover, there is no first reflecting layer which adjoins the substrate and is opaque to light. Instead, Argoitia teaches (claim 1):

1 . An optically variable pigment particle comprising:

a substrate particle (12)

a reflector layer (14) disposed on and encapsulating substrate particle (14)

a spacer layer (16) disposed on and encapsulating the reflector layer (14) and

an absorber layer (18) disposed on and encapsulating the spacer layer (16).

No second reflector layer is disclosed.

Spacer layer 16 can be made of a variety of materials including SiO, SiO_2 , TiO, ZrO_2, Al_2O_3, MgF_2, ZnS and Si_3N_4 (col. 5, lines 12, 13).

The reflector layer 14 is generally an opaque layer of a reflective metal, such as aluminum, copper, platinum, silver etc. (col. 5, line 3), or semitransparent (col. 5, p. 54).

The absorber layer 18 can be another layer of dielectric material, such as semi-transmitting layer of TiN or ZrN, or a non-opaque layer of metal (col. 5, p. 34).

In any event, there is no second reflecting layer, because an absorber is not a reflecting layer; therefore, it is respectfully submitted that the Examiner's interpretation of this reference is not supported by the reference. Moreover, Argoitia does neither propose to use two reflecting layers of the same material and a compound thereof in-between.

Thus, claim 25 is not anticipated by Argoitia.

The invention is also not obvious in view of Argoitia, either, because there is not the slightest hint in Argoitia to use the same material for the first and second reflecting layers and to use a chemical compound of said material for the in-between layer. The aim of this invention is to provide the Fabry Perot filter with only one vaporization station (page 1, [0006]).

Katsir describes an absorber-reflector for solar heating. Katsir shows only one

light-reflecting surface 4. It is not in an analogous art because solar heating has nothing to do with color-reflecting. As an example, Katsir does not, for instance, disclose a second reflecting layer, either.

Therefore, those of skill in the art could not arrive at the present invention when studying Katsir only, and, since neither Argoitia nor Katsir disclose a second reflecting layer, a combination of both references also fails to lead one of skill in the art to the presently claimed invention.

Accordingly, the invention is not obvious.

Since the basic idea of the invention is not obvious, the diameter of the layers cannot be obvious, either. Thus, it is respectfully submitted that the Examiner's statements on page 4, last paragraph of the office action, are based on impermissible hindsight.

To summarize, claim 25, as divided by feature and provided with reference numerals, reads as follows:

25. A substrate (2, 25) having a Fabry Perot filter applied comprising

25.1 at least three layers, including

25.1.1 a first reflecting layer (4) and a second reflecting layer (6),

25.2 wherein both the first reflecting layer (4) and the second reflecting layer (6) consist of metal, with mutually facing reflecting surfaces of the filter spaced apart by a gap of thickness d and enclosing an intermediate layer (5) transmissible to visible light and located in the gap,

25.3 wherein the first reflecting layer (4) adjoins the substrate (2) and is opaque to light and

25.4 the outer second reflecting layer (6) is partially transmissible to light,

25.5 wherein the first reflecting layer (4) is deposited on a web sheeting (25) (substrate) and the second reflecting layer (6) is deposited on the intermediate layer (5),

25.6 wherein the first and second reflecting layers (4,6) comprise a base material, namely of metal, which is the same in each of said first and second reflecting layers (4,6),

25.7 and the intermediate layer (5) comprises a chemical compound of the base

material and a further material and wherein the first reflecting layer (4) adjoins the substrate (2) and has a thickness between 10 and 200 nm, the second reflecting layer (6) between 1 and 20 nm and the intermediate layer (5) has a thickness between 50 and 2,000 nm.

From the foregoing it can be seen that features 25.1.1 and 25.2, in combination, are not disclosed by the cited references. The same is true of feature 25.5 ("web sheeting") and feature 25.7 ("chemical compound of the base material"). Argoitia does not disclose that the outer reflecting layer is partially transmissible to light and that the first reflecting layer is deposited on a web sheeting. Further, a sub-oxide is an oxide containing a relatively small proportion of oxygen. An aluminum sub-oxide is not transparent. As an absorber it cannot be used for the present invention. Further, the manufacturing process of $Al_2O_{>3}$ would be very complicated.

In view of the foregoing, allowance is respectfully requested.

The Commissioner is hereby authorized to charge any deficiency in the fees filed, asserted to be filed or which should have been filed herewith (or with any paper hereafter filed in this application by this firm) to our Deposit Account No. 50-0624, under Order No. NY-AFILM-204-US.

Respectfully submitted

FULBRIGHT & JAWORSKI L.L.P.

By /James R. Crawford/
James R. Crawford
Reg. No. 39,155

666 Fifth Avenue
New York, New York 10103
(212) 318-3000